

IN THE SPECIFICATION

Please amend the paragraph at page 2, lines 7-19, as follows:

As for example of internal passages or channels, in many cases the so-called biopsy channel is provided in endoscopes to permit insertion of forceps or other biopsy or surgical instruments. The biopsy channel extends through the endoscope toward an exit opening which is opened at the distal end of the insertion tube. ~~Besides~~ In addition, a suction channel is provided for aspiration of body fluids or the like. Normally, a suction channel is provided within an endoscope in communication with the biopsy channel. An aspirator with a vacuum pump device is connected to the other proximal end of the suction channel at the time of aspiration. A suction valve which is provided on the manipulating head assembly of the endoscope is connected to the suction channel, and is manipulated by an operator at the time of starting or ending aspiration.

Please amend the paragraph at page 3, line 1 to page 4, line 5, as follows:

Further, a cleaning fluid supply channel is provided in the endoscope for the purpose of supplying cleaning fluids to be used in cleaning or washing an observation window which is provided at the fore distal end of the insertion tube. The cleaning fluid normally consists of a cleaning liquid (normally cleaning water) and compressed air. When an observation window is contaminated, a cleaning liquid is spurted toward the observation window to wash away contaminants therefrom. Thereafter, compressed air is supplied and blasted against the observation window to remove droplets of the cleaning liquid. Thus, for this purpose, a liquid feed channel and an air feed channel are provided in the endoscope. An air/water feed valve which is provided on the manipulating head assembly of the endoscope is operated by an operator at the time of supplying a cleaning liquid and compressed air to the liquid and air feed channels. The liquid feed channel and the air feed channel are joined together in the

vicinity of the fore distal end of the insertion tube and connected to a spout nozzle which is directed toward the observation window. The air/water feed valve is put in a liquid feed position, whereupon a cleaning liquid is supplied to the spout nozzle and spurted toward the observation window. In the next place, the air/water feed valve is put in an air feed position, whereupon a jet of compressed air is spurted out from the nozzle. Thus, an observation window at the fore distal end of the endoscopic insertion tube can be washed clean without necessitating one to extract the insertion tube each time when it is found to be contaminated.

Please amend the paragraph at page 6, line 9 to page 7, line 2, as follows:

It is another object of the present invention to provide an endoscopic fluid supply conduit system which permits to supply a fluid selectively through one of two supply channels, one of which supply channels ~~being~~ is suitable for use at the time of injecting a fluid into a body cavity under uniform pressure and at a constant flow rate while the other one ~~being~~ is suitable for use in injecting a fluid under a desired pressure and at a desired flow rate.

Please amend the paragraph at page 8, line 7 to page 9, line 3, as follows:

According to the present invention, two fluid supply channels are provided internally of an endoscope to supply a fluid to a fluid jet injection port which is opened on a rigid tip end section at the fore distal end of the insertion tube of the endoscope. With the fluid supply conduit system according to the present invention, it is possible to select fluid supply either from a fluid feed port which is provided on a manipulating head assembly of the endoscope or from and through a universal cable of the endoscope. That is to say, the fluid supply conduit system is provided with first and second fluid conduits which can be selected by the fluid supply channel selector means. When a fluid is fed into the first fluid conduit through

the fluid connection port, the supplied fluid is ~~prevented~~ prevented from flowing into the second fluid conduit. On the other hand, when a fluid is supplied to the endoscope from the side of the second fluid conduit, the supplied fluid is prevented from flowing out of the fluid feed port on the manipulating head assembly of the endoscope.

Please amend the paragraph at page 11, lines 10-19, as follows:

Hereafter, the present invention is described more particularly by way of its preferred embodiments with reference to the accompanying drawings. Referring first to Fig. 1, there is schematically shown general layout of an endoscope. In this figure, ~~indicated at 1~~ is shown an insertion tube 1, ~~at 2~~ a manipulating head assembly 2 and ~~at 3~~ a universal cable 3 of the endoscope. As well known in the art, illumination and observation windows, an exit opening of a biopsy channel and an observation window washing nozzle are provided at the fore distal end of the insertion tube 1. In this case, the endoscope is provided with a fluid jet injection system.

Please amend the paragraph at page 15, line 5 to page 16, line 2, as follows:

An external screw 10a is provided on the circumferential surface of the mouth piece 10 on the outer side of the casing 11, for the purpose of retaining in a stabilized state the fluid feed adaptor 20 which is attached to the mouth piece 10, and at the same time for the purpose of holding in a hermetically closed state the second connection port 14 which is opened to the Luer taper portion 15b. On the other hand, a stopper ring 24 is threaded on an external screw provided on the fluid feed adaptor 20 in a transitional portion between the fore tapered portion 21 and the connector portion 22, into abutting engagement with outer end face of the mouth piece 10. The stopper ring 24 is securely fixed in position on the fluid feed adaptor 20 by the use of an adhesive or other suitable means. A screw ring 16 is mounted between

the stopper ring 24 and the flange portion 22b, in threaded engagement with an external screw portion 10a of the mouth piece 10. This screw ring 16 is provided with an inwardly turned portion 16a at its outer end and is thereby prevented from falling off the fluid feed adaptor 20.

Please amend the paragraph at page 16, lines 3-15, as follows:

Thus, the fluid feed adaptor 20 can be attached to the mouth piece 10 by tightening the screw ring 16 after inserting the tapered fore end portion 21 of the fluid feed adaptor 20 into the Luer taper portion 15b of the receptacle bore 15. ~~Whereupon, whereupon,~~ the stopper ring 24 is pushed in by the stopper portion 16a of the screw ring 16 until the tapered fore end portion 21 of the fluid feed adaptor 20 is brought into intimate contact with the Luer taper portion 15b of the receptacle bore 15 of the mouth piece 10. As a result, the fluid feed adaptor 20 fixedly attached to the mouth piece 10, hermetically closing the opening of the second connection port 14. Even when the fluid feed adaptor 20 is attached to the mouth piece 10, the closure plug ~~member 25~~ member 25 is fitted on the connector portion 22 as long as no fluid feed means is connected thereto.

Please amend the paragraph at page 16, line 16 to page 17, line 12, as follows:

Shown in Fig. 3 is a plug member 30 to be attached to the mouth piece 10 in place of the fluid feed adaptor 20. The plug member 30 is made of a resilient material like rubber, and is provided with a cylindrical main body portion 31 which is adapted to be pushed into the receptacle bore 15 of the mouth piece 10 to a predetermined degree, and a tubular fastening skirt portion 32 which is formed around the cylindrical main body portion 31. Accordingly, the outer open end of the receptacle bore 15 of the mouth piece 10 is closed upon attaching the plug member 30 to the mouth piece 10. In the Luer taper portion 15b of the receptacle

bore 15, the main body portion 31 of the plug member 30 is stopped at a position short of the second connection port 14. As a consequence, the second connection port 14 is communicated with the first connection port 13, and a fluid from the second fluid conduit 5 is supplied to the first fluid conduit 4 and spurted out from the fluid jet injection port 4a at the fore distal end of the insertion tube 1.

Please amend the paragraph at page 19, line 18 to page 20, line 16, as follows:

In Fig. 4, indicated ~~[[at]]~~ by reference number 40 is a first fluid conduit leading to a fluid jet injection port at the fore distal end of the insertion tube of the endoscope, and ~~[[at]]~~ by reference number 41 is a second fluid conduit which is connected to a fluid feed device through the universal cable of the endoscope. These first and second fluid conduits 40 and 41 are connected to first and second connecting portions 42a and 42b of a junction pipe member 42, respectively. The junction pipe member 42 is further provided with a third connecting portion 42c which is constantly in communication with the first fluid conduit 40. Connected to the third connecting portion 42c is one end of a communicating conduit 43 the other end of which is connected from a mouth piece 50 provided on the rear side of the manipulating head assembly of the endoscope. Accordingly, this communicating conduit 43 constitutes part of the first fluid conduit 40, and the other end which is connected with the mouth piece forms a connecting end. The forked junction pipe member 42 is securely anchored in position by a holder member 45 which is fixedly mounted on a support plate 44 within a casing of the manipulating head assembly.

Please amend the paragraph at page 21, line 19 to page 23, line 1, as follows:

With the arrangements as described above, it is possible to control the supply of a fluid in the same manner as in the first embodiment. Namely, when the fluid feed adaptor 20

is connected to the mouth piece 50 on a manipulating head assembly of a endoscope, a necessary amount of a fluid, for example, a necessary amount of a coloring agent can be send to the first fluid conduit 40 from a syringe or a similar fluid feed means which is connected to the fluid feed adaptor 20, and injected into a body cavity under a suitable pressure. In so doing, reverse flow of the supplied fluid toward the second fluid conduit 41 is prevented by the action of the check valve 47. Further, when the plug member 30 of Fig. 3 is fitted on the mouth piece or when the outer open end of the fluid feed adaptor 20 is closed with the lid member 25, a fluid can be supplied to the second fluid conduit 41 by actuating a fluid feed device which is connected to a proximal end portion of the universal cable. ~~Whereupon,~~ whereupon, the check valve 47 is pushed open by the supplied fluid pressure, and the fluid is supplied to the first fluid conduit 40 from the junction pipe member 42 and spurted into a body cavity from the fluid jet injection port at the distal end of the endoscopic insertion tube. Of course, there is no possibility of fluid leaks through the mouth piece 50 as long as it is closed with the plug member.

Please amend the Abstract at page 29 as follows: